

REMARKS

Claims 1-15, 17, and 23-29 are all the claims pending in the application.

Claims 1, 5, and 11 have been amended to recite that the claimed steps of calculating are conducting “using a processor.” Support may be found, for example, in Figs. 2, 3, 8, and 13. No new matter has been introduced. Entry and consideration of the amendments are respectfully requested.

I. Claims 1-15, 17 and 23-29 Are Patentable Under 35 U.S.C. § 101

On page 3 of the Office Action, the Office maintained the rejection of claims 1-15, 17 and 23-29 under 35 U.S.C. § 101 because the recited invention allegedly is “not tied to any particular apparatus or machine”. Office Action, page 4.

Solely to advance prosecution of the present application, claim 1 has been amended to recite that steps of the presently claimed method are conducted by “using a processor.” The recitation of “using a processor” is neither a field-of-use limitation nor is it insignificant extra-solution activity. The features showing that the claimed method steps critical to the invention are “tied to [a] particular apparatus or machine”, thereby satisfying the machine-or-transformation test, are illustrated, for example, in Figs. 2, 3, 8, and 13.

Accordingly, the present claims satisfy the requirements of § 101. Reconsideration and withdrawal of the rejection are respectfully requested.

II. Claims 1-15, 17, and 23-29 Are Patentable Under 35 U.S.C. § 103

The Office has maintained the rejection of claims 1-15, 17, and 23-29 under 35 U.S.C. § 103(a) as being unpatentable over Parada, et al. in view of Kiyuna because allegedly it would have been obvious to have used the imaging techniques of Kiyuna with

the microscopic evaluation of chromosome territories as taught by Parada, et al. On page 10 of the Office Action of December 17, 2009, the Office relied on Kiyuna as teaching “the statistical measurements of the instant claims” and particularly, “statistical imaging techniques and extracting a target object region from image data, as is instantly claimed.” Similarly, in the Advisory Action of May 24, 2010, the Office further asserted that Kiyuna “clearly teaches statistical image manipulation... ratio distributions and attribute parameters and classifying images into classes.” The Office refers to columns 1-4 of Kiyuna.

Applicants submit herewith a sworn English translation of their priority document, JP 2003-282122 with a priority date of July 29, 2003. Section 112 support for the present claims in the priority document is found, for example, on pages 1-11 of the translation.

In view of the above, Kiyuna (issued on November 14, 2006) is removed as prior art under § 102 (a) with respect to the present claims.

Further, to remove Kiyuna as prior art for purposes of § 103 with respect to the present claims, Applicants provide the following statement of common ownership:

Statement of Common Ownership:

The present application and Kiyuna, at the time the invention of the present application was made, were commonly owned by NEC Corporation.

In view of this statement of common ownership, Kiyuna is not available as prior art against the present claims for purposes of § 103. See 35 U.S.C. § 103(c).

Reconsideration and withdrawal of the rejection are respectfully requested at least for these reasons.

The rejection should be withdrawn for the additional reason that the references, even if combined as suggested, do not teach each feature of the claimed methods.

The presently claimed methods recite features that are not taught or suggested by Kiyuna. For example, the present claims particularly recite “standardizing a positioning state” and “setting an initial value for an attribute parameter”. As stated in the Response of May 5, 2010 such features, which are not taught or suggested by Kiyuna, are necessary to obtain the relevant information for estimating a cell state by using the extracted positioning state of a chromosome territory. The Office’s general assertion that Kiyuna teaches “statistical imaging techniques” and “extracting a target object region from image data” does not meet the claimed method steps.

Reconsideration and withdrawal of the rejection are respectfully requested.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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